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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,565	05/05/2006	Takuo Kugiya	290321US3PCT	9059
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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
CHAN, KAWING				
ART UNIT		PAPER NUMBER		
2837				
NOTIFICATION DATE		DELIVERY MODE		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/578,565

**Applicant(s)**

KUGIYA ET AL.

**Examiner**

Kawing Chan

**Art Unit**

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04/13/09.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-893)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 05/05/06

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Species I (claims 1-7) in the reply filed on 04/13/09 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim 8 is withdrawn.

Claims 1-7 are pending for examination.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 05/05/06 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by examiner.

### ***Claim Objections***

3. Claim 1 is objected to because of the following informalities: "ascent/descent" recited in line 4. Applicant is suggested to change the phrase to be "ascent or descent".
4. Claim 2 is objected to because of the following informalities: "an alarm" recited in line 8. Applicant is suggested to change the limitation to be "the alarm".

5. Claim 7 is objected to because of the following informalities:

"expansion/contraction" recited in line 5. Applicant is suggested to change the limitation to be "expansion or contraction".

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Donnell et al. (US 6,123,176) in view of Wang (US 2004/0195047 A1).

In Re claim 1, O'Donnell discloses an elevator apparatus (12) comprising:

- A detecting portion (62) which detects the magnitude of the tension of a main rope (22) (Col 3 lines 31-51) suspending a car (18);
- An abnormality control device (64) which is capable of ascertaining the magnitude of the tension based on information from the detecting portion (62) and which, when the magnitude of the tension becomes abnormal, outputs a braking command signal to a braking device (shut down the elevator system) (Col 3 line 52 to Col 4 line 15).

O'Donnell fails to disclose a plurality of braking devices which brake the car by methods that are different from each other.

However, with reference to Figure 1, Wang discloses an elevator apparatus comprises a plurality of braking devices (42, 62) which brake the car by methods that are different from each other (42 brakes the motor 41, and 62 brakes the sheave 61).

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of O'Donnell with the teachings of Wang, since it is known in the art at the time of the invention was made to include multiple set of braking devices so as to be able to provide the elevator system a backup brake in case of a malfunction of one of the braking devices.

In Re claim 4, Wang discloses a driving device (Figure 1) which has a drive sheave (61) around which the main rope (51) is wrapped and a motor (41) for rotating the drive sheave (61) and which causes the car to be raised and lowered through rotation of the drive sheave (61), wherein a brake device (62) which has a braking member (62) and which brakes the rotation of the drive sheave through contact of the braking member with the drive sheave (Paragraph [0020]: the second brake 62 catch the rope 51 on the sheave and prevent it from slipping, thus the rope is hold still by the second brake in contact with the sheave).

In Re claims 6 and 7, with reference to Figure 2, O'Donnell discloses the main rope (22) is provided with a connecting portion (34) connected to the car (18) through the intermediation of an elastic member (60), and wherein the detecting portion detects the magnitude of the tension by measuring a displacement amount of the connecting

portion with respect to the car (It would have obvious to one skilled in the to determine the displacement of a spring by using the compressive force) (Col 3 lines 31-51).

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Donnell et al. (US 6,123,176) in view of Wang (US 2004/0195047 A1) as applied to claim 1 above, and further in view of Kaczmarek et al. (US 2005/0133312 A1).

In Re claim 2, O'Donnell in view of Wang discloses the claimed invention except the alarm device.

However, with reference to Figure 1, Kaczmarek discloses an elevator system comprises an alarm device (925) which gives alarm to the effect that the magnitude of the tension has become abnormal, wherein the alarm device is adapted to give an alarm upon input of the abnormality signal (Paragraph [0021]).

While O'Donnell teaches the elevator system sends warning signal when the sensed level of tension in the rope reaches the first threshold and shut-down (brake) the elevator when the sensed level of tension in the rope reaches the second threshold (Col 3 line 60 to Col 4 line 14) and Kaczmarek teaches an alarm signal is outputted when the tension of the rope is abnormal, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of O'Donnell with the teachings of Kaczmarek with reasonable expectation of success.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Donnell et al. (US 6,123,176) in view of Wang (US 2004/0195047 A1) as applied to claim 1 above, and further in view of Delaporte (US 2004/0118638 A1).

In Re claim 3, as we have discussed above, Wang discloses a driving device (Figure 1) which has a drive sheave (61) around which the main rope (51) is wrapped and a motor (41) for rotating the drive sheave (61) and which causes the car to be raised and lowered through rotation of the drive sheave (61).

O'Donnell in view of Wang fail to disclose at least one of the braking devices is an operation control device which performs control over power supply to the motor to thereby brake the rotation of the drive sheave.

However, Delaporte discloses a method of braking an elevator apparatus by controlling power supply to the motor to thereby stop the rotation of the drive sheave (dynamic braking: it is well known in the art that dynamic braking is using traction motor as generator to slow down the elevator) (Paragraph [0007]).

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of O'Donnell and Wang with the teachings of Delaporte, since it is known in the art to utilize method of dynamic braking to slow down the elevator by using the motor as a generator.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Donnell et al. (US 6,123,176) in view of Wang (US 2004/0195047 A1) as applied to claim 1 above, and further in view of Yumura et al. (US 6,227,334 B1).

In Re claim 5, O'Donnell and Wang discloses the claimed invention except at least one of the braking devices is an emergency stop device which is mounted on the car, which has a braking member, and which brakes the car through contact of the braking member with a guide rail guiding the car.

However, with reference to Figure 4, Yumura discloses an elevator apparatus comprises an emergency stop device (31) which is mounted on the car, which has a braking member (wedges), and which brakes the car through contact of the braking member with a guide rail (18) guiding the car (12) (Col 7 lines 24-29).

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of O'Donnell and Wang with the teachings of Yumura, since it is known in the art to utilize wedges of an emergency braking device to contact the guide rail so as to be able to bring the elevator car to immediate stop in an emergency situation.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chatani, Toba and Buschborn et al. are further cited to show related teachings in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kawing Chan whose telephone number is (571)270-3909. The examiner can normally be reached on Mon-Fri 9am-5pm.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on 571-272-2227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BENTSU RO/  
Primary Examiner, Art Unit 2837

Kawing Chan  
Examiner  
Art Unit 2837